



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,311	03/23/2001	Eduardo Grizante Redondo	05788.0157	7258

22852 7590 11/14/2002

FINNEGAN, HENDERSON, FARABOW, GARRETT &  
DUNNER LLP  
1300 I STREET, NW  
WASHINGTON, DC 20006

EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
----------	--------------

1774.

11

DATE MAILED: 11/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/815,311

Applicant(s)

REDONDO ET AL.

Examiner

Jill M Gray

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1774

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Sonada et al, 5,707,732 (Sonada), in view of Betso et al, 6,262,161 B1 (Betso), to show the state of the art.

Sonada teaches a flame retardant composition, cable coated with said composition and a method for producing said cable, wherein the cable comprises a conductor and a flame-retardant coating, said coating being essentially as claimed by applicants. This coating comprises (a) an ethylene copolymer having a density of from .905 to .970 g/cm<sup>3</sup> and (b) a copolymer of ethylene with at least one alpha-olefin having a density of from 0.860 to 0.904 g/cm<sup>3</sup>, (c) magnesium hydroxide in an amount to impart flame-retardant properties, and grafting organo silane groups onto the polymer chain of at least one of the polymeric components. See column 2, lines 18-24, column 3, lines 53-57, and column 6, lines 41-59. Furthermore, Sonada teaches that the polymeric component (a) is a component of the type set forth in claim 17 (column 3, lines 64-67, and that the component (b) is made using a single-site catalyst as required by claim 19 (column 2, lines 30-31). Accordingly, the property required by claim 18 is inherent. As to claims 20-22, Sonada teaches the same type of magnesium hydroxide

Art Unit: 1774

contemplated by applicants and that it is present within applicant's range. See column 6, line 60 through column 7 line 13. As to claims 25-28, Sonada teaches that the components in his composition are within the claimed ranges, (column 4, lines 13-18) thus, the properties set forth in claims 23-24 are inherent. Regarding the hydrolyzable organic silane groups grafted onto the polymer chain "for compatibilization of the natural magnesium hydroxide with the polymeric components", organo silane compounds are known coupling agents. Hence, this requirement, "for compatibilization of the natural magnesium hydroxide with the polymeric components" is no more than the requirement that the organic silane component function in its normal capacity, i.e. the function as a coupling agent. Betso is cited to show the state of the art at the time the invention was made, and teaches compositions comprising an ethylene random interpolymers, magnesium hydroxide and silane coupling agents. The coupling agent can be grafted onto the interpolymers and serves to couple the filler to the interpolymers. Thus this property is an inherent function of the organic silane component.

Therefore, the teachings of Sonada anticipate the invention as claimed in present claims 16-30.

### ***Response to Arguments***

3. Applicant's arguments filed September 11, 2002 have been fully considered but they are not persuasive.

Applicants argue that the present invention, unlike Sonada, is not intended to allow moisture curing of a polymer, rather to give a more effective interaction between natural magnesium hydroxide and polyethylene polymers with a uniform distribution of

Art Unit: 1774

the filler into the polymer matrix. Applicants further argue that Sonada discloses using alkenyl trialkoxy silanes to allow crosslinking and moisture curing of a copolymer and fails to disclose hydrolyzable organic silane groups grafted onto the polymer chain for compatibilization of the natural magnesium hydroxide with the polymer as recited in pending claims 16, 29, and 30.

In this concern, it is noted that the present claims are not limited to a specific organo silane and only requires that the organo silane be hydrolyzable. Furthermore, the alkenyl trialkoxy silanes of Sonada are of the same type contemplated and disclosed by applicants as being suitable for the present invention. The fact that Sonada is silent as to compatibilization of the magnesium hydroxide with the polymer to result in a uniform distribution of the filler into the polymer matrix does not provide evidence of the absence of this property. Betso clearly shows that the level of ordinary skill and knowledge in the art at the time the invention was made included organo silane components as coupling agents and the basic functions associated therewith. As set forth previously, it is the examiner's position that this limitation is an inherent property of the organic silane component. Applicants have not clearly identified that which they regard as their invention.

No claims are allowed.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1774

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M Gray whose telephone number is 703.308.2381. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.5408 for regular communications and 703.305.3599 for After Final communications.

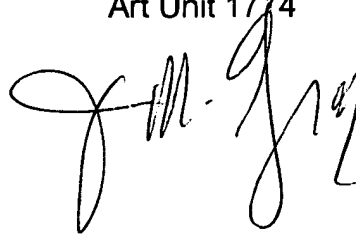
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.

Application/Control Number: 09/815,311  
Art Unit: 1774

Page 6

Jill M Gray  
Examiner  
Art Unit 1774

jmg  
November 12, 2002

A handwritten signature in black ink, appearing to read "Jill M. Gray", written over the printed name.